WHAT IS CLAIMED IS:

1. An apparatus comprising:

an examination arm with, at one end thereof, an image receiver and a radiation delivery head at the other end,

a support on which the arm is mounted;

the arm being mounted for rotation about a first axis substantially perpendicular to the direction of the examination arm and passing through the center of an examination position;

the arm being further mounted for rotation about a second horizontal axis substantially perpendicular to the first axis and to the examination arm; and

a support column on which the support can be moved up and down vertically.

- 2. The apparatus of claim 1 wherein the examination arm is mounted on a support for rotation about the second axis via a C-shaped arm.
- 3. The apparatus of claim 1 wherein the examination arm is mounted for rotation about the second axis with a range of angular travel varying from a vertical position to a horizontal position.
- 4. The apparatus of claim 2 wherein the examination arm is mounted for rotation about the second axis with a range of angular travel varying from a vertical position to a horizontal position!
- 5. The apparatus of claim 1 wherein the examination arm is mounted for rotation about the first axis with a range of angular travel greater than or equal to 180° at both sides of a vertical position of the examination arm.
- 6. The apparatus of claim 2 wherein the examination arm is mounted for rotation about the first axis with a range of angular travel greater than or equal to 180° at both sides of a vertical position of the examination arm.

- 7. The apparatus of claim 3 wherein the examination arm is mounted for rotation about the first axis with a range of angular travel greater than or equal to 180° at both sides of a vertical position of the examination arm.
- 8. A method for taking images of an object with an apparatus comprising:

an examination arm with, at one end thereof, an image receiver and a radiation delivery head at the other end;

a support on which the arm is mounted the arm being mounted for rotation about a first axis substantially perpendicular to the direction of the examination arm and passing through the center of a breast examination position,

the arm being further mounted for rotation about a second horizontal axis substantially perpendicular to the first axis and to the examination arm;

a support column on which the support can be moved up and down vertically;

comprising the steps of:

adjusting the position of the support on the support column and the angular position of the examination arm about the second axis;

adjusting the angular position of the examination arm about the first axis; and

positioning the object and taking the images.

9. The method of claim 8 comprising the steps of:

releasing the object;

changing the angular position of the support arm about the first axis;

and

installing the object and taking the images.

- 10. The method of claim 8 wherein the angular rotation of the examination arm about the first axis defines a vertical plane.
- 11. The method of claim 9 wherein the angular rotation of the examination arm about the first axis defines a vertical plane.
- 12. The method of claim 8 wherein the angular rotation of the examination arm about the first axis defines an inclined plane.
- 13. The method of claim 9 wherein the angular rotation of the examination arm about the first axis defines an inclined plane.
- 14. The method of claim 8 wherein angular rotation of the examination arm about the first axis defines a horizontal plane.
- 15. The method of claim 9 wherein angular rotation of the examination arm about the first axis defines a horizontal plane.